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🔍 Title: **JP7029563A2: BATTERY SEPARATOR AND LITHIUM BATTERY USING THE SAME**

🔍 Derwent Title: Porous film or sheet of high molecular weight polyethylene - produced by plasticised melt extrusion, melt drafting and solvent leaching of plasticiser
[\[Derwent Record\]](#)

🔍 Country: **JP Japan**

🔍 Kind: **A** (See also: [JP3050021B2](#))

🔍 Inventor: **FUJII TOSHIO;
HANDA KEISHIN;
NAKANISHI HIROSHI;
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USAMI YASUSHI;**

🔍 Assignee: **MITSUBISHI CHEM CORP**
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🔍 Published / Filed: **1995-01-31 / 1993-11-05**

🔍 Application Number: **JP1993000276947**

🔍 IPC Code: **H01M 2/16; H01M 2/18; H01M 6/14; H01M 10/02;**

🔍 Priority Number: **1993-05-11 JP1993000109619**

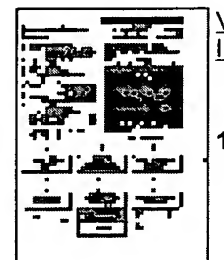
🔍 Abstract: **PURPOSE:** To prevent the overheating of the battery by using as a separator a porous film or sheet made of ultrahigh molecular weight polyethylene having a viscosity average molecular weight of a value greater than that specified, the film or sheet having a specified thickness, air permeability, hole percentage, pin piercing strength, thermal blockage temperature, and thermal film breakage resistance temperature.

CONSTITUTION: As an ultrahigh molecular weight polyethylene, polyethylene having a viscosity average molecular weight of 500,000 or more and, as a plasticizer added thereto, paraffin wax, n-alkane, or the like which has compatibility with the ultrahigh molecular weight polyethylene and which does not evaporate during melt-kneading or forming is used. The polyethylene and plasticizer are kneaded together and are melt-extruded to make a film or a sheet. As a result, a separator with a high resistance to thermal film breakage which has a thickness of 10 to 100µm, an air permeability of from 20 to 2000sec/100cc, a hole percentage of 15 to 80%, a pin-piercing strength of 120g/25µm or more, and a thermal film breakage temperature of 160°C or more is provided.

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🔍 INPADOC **None**

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PDF	Patent	Pub.Date	Inventor	Assignee	Title
	US6586912	2003-07-01	Tsukamoto; Hisashi	Quallion LLC	Method and apparatus for amplitude limiting battery temperature spikes

☞ Other Abstract
Info:

CHEMABS 121(26)302605X DERABS C94-201615



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(19)

(11) Publication number: **07029563 A**

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PATENT ABSTRACTS OF JAPAN(21) Application number: **05276947**(51) Intl. Cl.: **H01M 2/16 H01M 2/18 H01M 6/14**
10/02(22) Application date: **05.11.93**(30) Priority: **11.05.93 JP 05109619**(43) Date of application
publication: **31.01.95**(84) Designated contracting
states:(71) Applicant: **mitsubishi chem corp**(72) Inventor: **FUJII TOSHIO**
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WATANABE KIYOUSUKE
USAMI YASUSHI

(74) Representative:

**(54) BATTERY SEPARATOR
AND LITHIUM BATTERY
USING THE SAME**

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PURPOSE: To prevent the overheating of the battery by using as a separator a porous film or sheet made of ultrahigh molecular weight polyethylene having a viscosity average molecular weight of a value greater than that specified, the film or sheet having a specified thickness, air permeability, hole percentage, pin piercing strength, thermal blockage temperature, and thermal film breakage resistance temperature.

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